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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/975,991

10/15/2001

Neil John Hursey

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03/10/2006

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

TO, BAOTRAN N

ART UNIT

PAPER NUMBER

2135

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/975,991

Applicant(s)

HURSEY ET AL.

Examiner

Bao tran N. To

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office action responds to the Applicant's Amendment filed on 12/14/2005. Applicant amended independent Claims 1, 9 and 17 and added new Claims 25-27. Claims 1-27 remain for examination.

Response to Arguments

2. Applicant's arguments filed 12/14/2005 have been fully considered but they are not persuasive.

Applicant argues "Clearly, such excerpt does not even suggest applicant's claim language where (data [is stored that] identify[ies] computer files that have been written to a data storage device and for which a scan for malware has yet to be performed)."

Examiner respectfully disagrees with applicant. Cozza explicitly discloses this information is stored in a cache in a non-volatile storage medium and when files are subsequently scanned for viruses (see Abstract).

Applicant argues "applicant respectfully asserts that neither Cozza nor Waldin teach 'scanning code operable as a low priority task within a multitasking environment to conduct malware scanning upon computer files identified as haven been written to a data storage device and for which a scan for malware has yet to be performed,' as presently claimed by applicant."

Examiner strongly disagrees with this contention. Examiner notes that this argument does not make sense because Applicant did not claim this limitation "as haven been written to a data storage device and for which a scan for malware has yet to be performed" as discussed in the previous Office action. Thus, examiner does not find the argument persuasive.

Therefore, the Office action dated on 09/08/2005 for independent Claims 1, 9 and 17 is maintained.

Claim Objections

3. Claims 1, 9 and 17 are objected to because of the following informalities: the limitation "have been written to a data storage device" in line 8 of Claims 1, 9, 17 should be ---have not been written to a data storage device--- . Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cozza (U. S. Patent 5,502,815) herein referred to as Cozza in view of Waldin et al.

(U. S. Patent 6,094,731) herein referred to as Waldin.

Referring to Claims 1, 9 and 17, Cozza discloses a computer program product for controlling operation of a computer to detect malware (abstract), said computer program product comprising:

pending scan database code operable to maintain a pending scan database (RAM 19) storing data identifying computer files (files/volumes) that have been written to a data storage device (storing medium) and for which a scan for malware has yet to be performed (Fig. 2 and col. 3, lines 35-43); and

However, Waldin discloses scanning code operable as a low priority task within a multitasking environment to conduct malware scanning upon computer files identified within said pending scan database (col. 1, lines 20-45) as have not been written to a data storage device and for which a scan for malware has yet to be performed (col. 3, lines 45-65 and col. 6, lines 10-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the Waldin's invention within Cozza to provide scanning code operable as a low priority task within a multitasking environment as taught by Waldin with the motivation to allow quickly increasing the speed of scanning computer files and detecting viruses and malwares in computer files (col. 1, lines 15-20).

Referring to Claims 2, 10 and 18, Cozza and Waldin disclose the limitations as discussed in Claims 1, 9 and 17 above. Cozza further discloses file write code operable as a computer file is written to a storage device to add data identifying said computer file to said pending scan database (col. 2, lines 55- 67 through col. 3, lines 1-8).

Referring to Claims 3, 11 and 19, Cozza and Waldin disclose the limitations as discussed in Claims 1, 9 and 17 above. Cozza further discloses file read code operable in response to a read request for a computer file included within said pending scan database to trigger said scanning code to scan said computer file as a high priority task before permitting read access to said computer file (col. 3, lines 45-55).

Referring to Claims 4, 12 and 20, Cozza discloses the limitations as discussed in Claims 1, 9 and 17 above. Cozza further discloses scanned file database code operable to maintain a scanned file database (cache 20) storing data identifying computer files that have been scanned for malware (col. 3, lines 35-40).

Referring to Claims 5, 13 and 21, Cozza and Waldin disclose the limitations as discussed in Claim 4 above. Cozza further discloses wherein said data identifying computer files that have been scanned for malware includes checksum data derived from said computer files that were scanned (col. 3, lines 60-67).

Referring to Claims 6, 14 and 22, Cozza and Waldin disclose the limitations as discussed in Claim 5 above, Cozza further discloses file read code operable in response to a read request for a computer file to detected if said computer file is within said scanned file database and a checksum value recalculated for said computer file matches that stored within said scanned file database before permitting said read request (col. 3, lines 45-67 through col. 4, lines 1-60).

Referring to Claims 7, 15 and 23, Cozza and Waldin disclose the limitations as discussed in Claim 4 above, Cozza further discloses initiation code operable upon startup to detect any computer files stored on a storage device not included within either said pending scan database or said scanned file database and to add such computer files to said pending scan database (col. 3, lines 35-55).

Referring to Claims 8, 16 and 24, Cozza and Waldin disclose the limitations as discussed in Claim 1 above, Cozza discloses wherein said malware comprises one or more of: (i) a computer file infected with a computer virus; (ii) a Trojan; (iii) a banned computer file; and (iv) a computer file containing banned content (col. 2, lines 55-65).

Referring to Claim 25, Cozza and Waldin disclose the limitations as discussed in Claim 1 above, Cozza discloses wherein an order of said computer files identified within said pending scan database being scanned is based on an algorithm that estimates the

likelihood of a read request being performed on each computer file (col. 3, lines 50-67 and col. 4, lines 15-60).

Referring to Claim 26, Cozza and Waldin disclose the limitations as discussed in Claim 4 above, Cozza discloses wherein only computer files determined to be clean from malware scanning are stored in the scanned file database (col. 4, lines 59-67 through col. 5, lines 1-7).

Referring to Claim 27, Cozza and Waldin disclose the limitations as discussed in Claim 1 above, Cozza discloses wherein an order of said computer files identified within said pending database being scanned is based on the order in which said computer files were placed in said pending scan database (col. 3, lines 50-67 and col. 4, lines 15-60).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

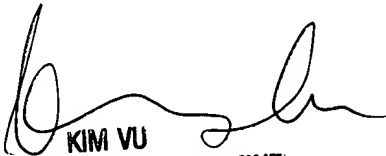
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baotran N. To whose telephone number is 571-272-8156. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Baotran To
03/03/2006


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100